

<b>PARTICIPANT TYPE.....</b>	<b>ALL</b>
<b>HIGH RISK.....</b>	<b>YES</b>

**RISK DESCRIPTION:**

An autoimmune disease precipitated by the ingestion of gluten (a protein in wheat, rye, and barley) that results in damage to the small intestine and malabsorption of the nutrients from food. Also known as celiac sprue, gluten sensitive enteropathy and non-tropical sprue.

Presence of celiac disease diagnosed by a physician as self-reported by applicant, participant, or caregiver; or as reported or documented by a physician, or someone working under physician's orders.

**ASK ABOUT:**

- Attitude and knowledge about condition and foods to avoid
- Barriers to following treatment plan (e.g., health beliefs, religious or cultural practices, finances, access to follow-up health care)
- Food-medication interactions
- Supplements including vitamins, minerals, herbal products and targeted nutrition therapy products
- Weight history
- Gastrointestinal symptoms including abdominal pain and bloating, diarrhea, and constipation
- Lactose, fructose and other carbohydrate intolerances
- Gastrointestinal profile including intestinal biopsy and antibody levels
- Iron deficiency anemia (common in individuals newly diagnosed with celiac disease)
- Typical food intake with particular attention paid to calcium, iron, vitamin B complex, and vitamin D
- Presence of other disease states such as thyroid conditions, other autoimmune and endocrinologic disorders including diabetes
- Social support for dietary compliance

## **NUTRITION COUNSELING/EDUCATION TOPICS:**

- Promote breastfeeding throughout the first year of life, with exclusive breastfeeding until 4-6 months of age.
- Gluten is the component that results in this condition.
  - Gluten-containing ingredients that must be avoided include wheat, barley, rye, wheat bran, wheat starch, wheat germ, (barley) malt (malt extract, malt flavoring, malt syrup).
  - Additional types of wheat include spelt, kamut, emmer, einkorn, semolina, faro, farina, hydrolyzed wheat protein, bulgur, couscous, durum, and triticale.
  - Oats can generally be consumed if they are a pure source and uncontaminated.
- Identify the WIC foods that can be consumed.
- Identify any nutrients that may be lacking from the diet due to food restriction and identify other food sources for those nutrients.
- Determine and discuss an eating pattern appropriate for the participant's weight goal (i.e., maintain, gain or lose weight). Remember that gluten-free "look alike" foods can be higher in calories, fat and sugar than their gluten-containing counterparts.
- Encourage whole or enriched gluten-free grains and products such as brown rice, wild rice, buckwheat, quinoa, amaranth, millet, sorghum, and teff. A gluten-free dietary pattern may result in a diet that is low in carbohydrate, iron, folate, niacin, zinc and fiber.
- Reinforce label-reading for foods, medications, and dietary supplements.
  - The Food Allergen Labeling and Consumer Protection Act (FALCPA) requires companies to identify in "plain English" the eight most prevalent food allergens.
  - Wheat is covered by FALCPA; barley (malt), rye and oats are not covered by the act.
- Untreated celiac disease results in villous atrophy and malabsorption. Reduced bone mineral content and bone mineral density have also been reported in individuals with this disease.
- Long-term dietary compliance improves outcomes related to bone density, iron deficiency anemia, villous atrophy, gastrointestinal and neurological symptoms, pregnancy outcomes, child growth and development and quality of life.

<b>POSSIBLE REFERRALS:</b>
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- If the participant requires in-depth nutritional intervention beyond the scope of WIC services, refer to primary care provider, dietitian or interdisciplinary team with expertise in this area of practice.
- If the participant is taking any non-prescribed vitamin or mineral supplements, herbal supplements, or targeted nutrition therapy products, advise discussing these with the primary care provider.
- If the participant has reduced bone density or reduced serum levels of 25-hydroxyvitamin D, refer to primary care provider to discuss additional calcium and vitamin D from gluten-free supplements.
- If the participant does not have an ongoing source of health care, refer to primary care providers in the community or local public health department.
- Refer infants and children to Children's Special Health Services program (<http://www.ndhealth.gov/cshs/>).
- Refer infants and children to the Right Track Program for early intervention services (<http://www.nd.gov/dhs/services/disabilities/earlyintervention/parent-info/right-track.html>).